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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,594

06/27/2003

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EXAMINER

MILLS, DONALD L

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

10/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/608,594

Applicant(s)

PERLMAN, STEPHEN G.

Examiner

Donald L. Mills

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :09/08/2005; 10/18/2005; 10/27/2005.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 45-69 are rejected under 35 U.S.C. 102(e) as being anticipated by Rios (US 2004/0125820 A1).

Regarding claims 45, 50, and 60, Rios discloses a multiprotocol WLAN access point device, which comprises:

A first transceiver operable to receive data transmitted on a first frequency channel; a second transceiver connected to the first transceiver via a wired link, the second transceiver operable to transmit the data on a second frequency channel (Referring to Figure 1, receiving transmission from wireless stations (STA), such as 117 and 120, the high capacity multiprotocol repeater (HCMR) uses two actual 802.11abg radios to provide the three virtual MPR wireless links: the upstream virtual distribution system (DS) plus the downstream 802.11a and 802.11/bg access point services to the associated distinct protocol stations, as well as the virtual DS wireless daisy chain link to other downstream multiprotocol devices (MPD). As shown in Figures 1, 3D, and 3E, the two radios are coupled together. The two radios operate according to

Art Unit: 2616

different protocols and different respect frequency channels for transmission to DS's. See paragraphs 0015, 0023, 0029, and 0030.)

Regarding claims 46 and 66, Rios discloses *wherein the first and second transceivers each includes a transmitter and a receiver* (Referring to Figures 1 and 3D, HCMPR uses two actual 802.11abg radios, comprising transmitters and receivers, to provide the three virtual MPR wireless links: the upstream DS plus the downstream 802.11a and 802.11/bg access point services to the associated distinct protocol stations, as well as the virtual DS wireless daisy chain link to other downstream MPD. See paragraph 0015.)

Regarding claims 47, 53, and 67, Rios discloses *wherein the second transceiver is further operable to receive data on the second channel and the first transceiver is further operable to transmit data on the first channel, such that the repeater is operable to function in a bi-directional manner* (Referring to Figures 1 and 3D, HCMPR uses two actual 802.11abg radios, comprising transmitters and receivers, to provide the three virtual MPR wireless links: the upstream DS plus the downstream 802.11a and 802.11/bg access point services to the associated distinct protocol stations, as well as the virtual DS wireless daisy chain link to other downstream MPD. See paragraph 0015.)

Regarding claims 48 and 68, Rios discloses *wherein the transmitters and receivers of the first and second transceivers are frequency programmable* (Referring to Figure 1, like the multiprotocol access point, the HCMPR utilizes a tunable frequency-band in both the 2.4 and 5 GHz bands. See paragraphs 0028-0029.)

Regarding claims 49 and 69, Rios discloses *wherein the first and second frequency channels are either within a 5GHz or a 2.4GHz frequency band* (Referring to Figure 1, like the

Art Unit: 2616

multiprotocol access point, the HCMPR utilizes a tunable frequency-band in both the 2.4 and 5 GHz bands. See paragraphs 0028-0029.)

Regarding claim 51, Rios discloses *a destination device that receives the transmitted data* (Referring to Figures 1 and 3D, HCMPR uses two actual 802.11abg radios, comprising transmitters and receivers, to provide the three virtual MPR wireless links: the upstream DS plus the downstream 802.11a and 802.11/bg access point services to the associated distinct protocol stations, as well as the virtual DS wireless daisy chain link to other downstream MPD. See paragraph 0015.)

Regarding claims 52, 61, and 63, Rios discloses *wherein the source device is coupled to a broadband data network* (Referring to Figure 1, receiving transmission from STA's, such as 117 and 120 that are coupled to the broadband wireless network, the HCMPR uses two actual 802.11abg radios to provide the three virtual MPR wireless links: the upstream virtual DS plus the downstream 802.11a and 802.11/bg access point services to the associated distinct protocol stations, as well as the virtual DS wireless daisy chain link to other downstream multiprotocol devices MPD. See paragraphs 0015, 0029, and 0030.)

Regarding claims 54 and 64, Rios discloses *wherein either the first or the second transceiver operates at any given time* (Referring to Figure 1, the HCMPR utilizes simultaneous operation of the two actual radios to support a greater volume of wireless traffic. See paragraph 0015.)

Regarding claim 55, Rios discloses *wherein the data comprises video media content* (Referring to Figure 1, the HCMPR utilizes the IEEE 802.11 standard for data packet

Art Unit: 2616

transmission, such as voice, data, or video media content as commonly transmitted over a WLAN. See paragraph 0033.)

Regarding claims 56 and 62, Rios discloses *one or more additional repeaters, each having a pair of transceivers wired together to receive and re-transmit the data* (Referring to Figures 1 and 3B, triple single protocol AP repeater (TSPAPR) 105 comprise a pair of radios to receive and repeater data packet transmission. See paragraph 0025.)

Regarding claims 57-59 and 65, Rios disclose *a second repeater having third and fourth transceivers, the third transceiver receiving the data from the repeater on the second frequency channel, and the fourth transceiver retransmitting the data on a third frequency channel* (Referring to Figures 1 and 3B, triple single protocol AP repeater (TSPAPR) 105 comprise a pair of radios to receive and repeater data packet transmission on distinct IEEE 802.11a and 802.11b frequency channels to a respective DS, logically equivalent to a computer. See paragraph 0025.)

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Donald L Mills/

September 25, 2007


CHI PHAM
SUPERVISORY PATENT EXAMINER

9/27/07